

October 1993

approach

The Naval Aviation Safety Review

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**COMMANDER
NAVAL SAFETY CENTER**

Today's Navy is a safer place to work than ever before. Most categories of mishaps have had substantial reductions in rates over the last 10 years. Unfortunately, that is only partly true in aviation. After a steady decline from 6.30 in FY 80 to a record low in FY 89 of 2.25, the Navy/Marine aviation-mishap rate has climbed to and hovered around 3.00 over the next three years. It appears 1993 may have a record low number of Class As (50 or less), but because of reduced flight hours, the rate remains near 2.80.

There are three programs that should help us achieve continuous improvement. First, we are taking a hard look at teaching the principles of risk assessment and management. See my message in the July issue of *Approach* for more on risk assessment.

The second program is the continuing improvement of our technology. For example, systems like GPWS (Ground Proximity Warning System) will help reduce CFIT mishaps. Mechanical diagnostics and health and usage monitoring systems are available and in use commercially. I wish we could get them faster.

Yet, no matter how many improvements we make in systems, training and equipment, it all falls apart without one final component — the human one. Our major causal factor is still human error. To meet this challenge, the Naval Safety Center continues to support human-factors research and programs, such as aircrew-coordination training and the human-factors review process.

Each year, we destroy 50 or more aircraft and kill about 50 aviators. Those figures represent four squadrons of aircraft and almost half of the aircrew to fly them. That's a cost we cannot afford.

"Guido"

A.A. GRANUZZO
Rear Admiral, U.S. Navy

inside approach

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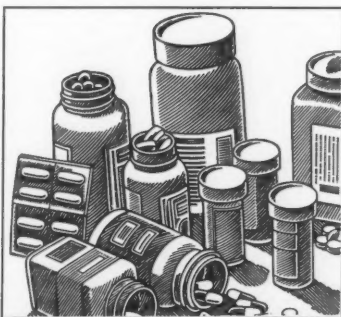
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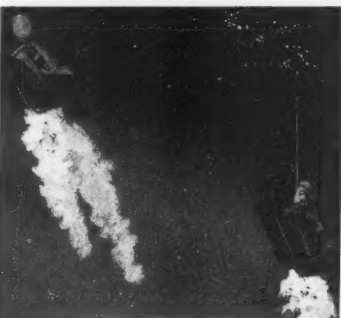
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On the cover: A KC-130T of VR-48 taxis at NAF Washington, D.C.
Photo by PH2 Bruce R. Trombecky

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The Hypoxic Avengers & "Mr. Vegas" Play the Odds

LCdr. Dave Parsons



By Lt. Tim Kuehhas
with LCdr. Todd Zecchin
and
Lt. John Baker

With our third Southern Watch mission just about done, the pilot turned our Prowler toward the recovery tanker pattern over Saudi Arabia. The mission had been relatively quiet, and after sitting on our ejection seats for a little more than three hours, we were looking forward to tanking and getting back to mother for a night recovery and Lima Charlie 3 (late chow for 3)

As we crossed the Saudi border, the pilot noticed that the oxygen gauge read just over six liters remaining, which was uncomfortably low for the amount of time we'd been airborne. With our tanker at FL 270 we had no choice but to stay at altitude and keep an eye on the gauge until we finished tanking. "It's probably just a faulty indicator," we thought, "and with cabin pressurization we'll be fine." After all, what are the odds that we'll have an oxygen leak and a cabin pressurization failure before our descent?

Tanking off the KC-10 went smoothly. While on the tanker track we joined the other mission Prowler, took the lead and headed home. Much to our chagrin, the weather below was horrible, and we were down to three liters of oxygen with an oxygen warning light flashing at us. Confident that we had more than a simple indicator problem, we decided to remove our masks to save what was left for the approach.

A quick glance at the cabin altitude as we pulled our masks off showed normal, and we were less than 10 minutes from feet wet, where we could descend to a safe altitude and get below the bad weather. Things were looking good as I checked our wingman's fuel state and prepared for the descent checks.

As I readied the cockpit for the descent, I noticed that it was becoming hard to concentrate; not to say that this isn't a normal condition for me, but there were some other alarming sensations. I felt a bit numb and tingly. This, again, was a feeling I'm familiar with, but never in a Prowler. Shortly thereafter I began to grey out. That's when it hit me: possible hypoxia.

Since I was sitting in the ECMO 1 position—front right seat—I was the only crew member who didn't have a gauge to reference, so I announced to the crew

that I wasn't feeling well and asked if someone would check the cabin pressure for me as I put my mask back on. The pilot looked down at his gauge, immediately put his mask on and began to descend as ECMO 3 announced that the cabin altitude was climbing through 22,000 feet.

Before we could even break out the emergency checklist, ECMO 3 had the presence of mind to suggest that we turn on the defog to help pressurize the cockpit. It worked. The cabin altitude immediately began to decrease to 8,000 feet. We let our wingman know what was happening and completed the emergency check. When I checked in with Marshal, I told them what the problem was, and they marshalled us at angels 7. Once we made it down to a safer altitude we again removed our masks to save what little oxygen we had remaining for the approach. We discussed the probability of having to use the emergency oxygen in the seat pan if need be, but as things turned out we made it home with a few breaths to spare.

As we debriefed the hop it became evident that we all experienced similar symptoms of hypoxia as pressurization insidiously failed: partial loss of motor skills, foggiess and the initial phase of grey out. Luckily, we had not developed some of the other symptoms of hypoxia, characterized by apathy, indifference, belligerence and a total loss of judgment. None of us were aware, however, of just how close we were to unconsciousness until we took in a lung-full of pure oxygen that instantly cleared our heads, and made all the lights suddenly brighter. I can only credit the altitude chamber training I've completed twice in my short career for my recognition of the symptoms of hypoxia before my crew and I became statistics.

The resulting maintenance inspection revealed two loose B-nuts—one on ECMO 1's oxygen T-handle causing the oxygen leak and one on the pressure regulator valve causing the pressurization failure. If I had been asked, before this flight, what I thought the odds were of a dual failure of this nature, I would have thought that they were good enough to lay money on. But that's just me, "Mister Vegas."

LCdr. Zecchin, Lt. Kuehhas, and Lt. Baker are assigned to VAQ-138.



Last Flight

By Lt. Tim Fisher

It was another CQ det just like all the others. We had our NATOPS brief with the group, then had to wait due to 0/0 weather.

As I looked out the ready room window, I couldn't help thinking that the hop would be canceled. My copilot and I did another NATOPS brief together. We were both ready to fly and hoped the weather would clear. We covered ejection in our brief, then waited approximately two-and-a-half hours before the SDO told us to walk.

We preflighted the aircraft. As I entered the cockpit, I looked at my copilot and asked him if he wanted the front seat. He delayed a second and said, "No, this is your last time going to the ship." (This happened to be my last det before getting out of the Navy.) So we climbed in, got clearance, and prepared for takeoff. I ran up the aircraft engines, checked the instruments, and wiped out the controls. I checked to see if he was ready to go, and he replied, "Let's do it."

Once airborne, we cleaned up, did our 3,000-foot checks and climbed to the assigned altitude and heading. We changed to the ship's TACAN channel and reported a sweet lock on mother to Departure. They cleared us to Seabreeze, then to marshal. We were assigned holding at angels 6.5. At this point, we felt that the chances of being called down were slim, so we began to talk about where we were from, what schools we attended, and general information about ourselves.

Approximately 20 minutes went by before we were told to drop to angels 6.0 and contact Tower. We were told to Charlie, and two minutes later we were in the

break with the hook down ready to rock-and-roll (We were both excited, because we were going to get some traps.)

We caught a 3-wire and rolled out of the landing area to wait behind several aircraft. Here, we did a takeoff checklist and rogered a 10.5 weight board. We taxied over the shuttle, took tension, and were passed to the cat officer for runups. I saluted and we continued down the stroke and into the air.

I rotated, dropped flaps to full and put the hook down. We did a landing checklist in the turn and did the same approach to another landing. This time, we had a straight shot to cat 1, so we did the takeoff checklist on the roll, rogering a 10.5 weight board. Again, an identical shot as before, seeing 105-110 knots at the end of the stroke. After trapping, we did the takeoff checklist and rogered a 10.5 weight board, for the third time. The aircraft went into tension and we were passed to the cat officer for runups. I went to military, holding the cat grip firmly. After asking if my copilot was ready, I saluted the shooter and he touched the deck. I looked to the front preparing myself for the shot.

Everything that had happened up to this point was perfect. But as soon as the aircraft began to accelerate, I knew something was wrong. This shot didn't feel like the others, so I immediately looked at the airspeed indicator. About half-way down the stroke, it was showing 40 knots. My mind was saying, "Eject while you can" and my heart was saying, "Stay with the aircraft." I knew from experience that cold shots just don't exist, but all the indications were telling me different. When the catapult hit the water brakes, my airspeed indicated 75 knots. I couldn't believe it.

I kept thinking, "I should still try to fly this thing!" As we became airborne, as the indicator showed 80 knots. I rotated to the proper angle of attack; stick position was trimmed and neutral. Nothing happened, no fly-away as before, just a rapid descent. I rotated a little more but the aircraft still did not respond. My decision was now 100 percent: eject!

I reached down with my right hand, at the same time making an ICS call to my copilot to eject. My right hand found the lower handle and my left hand came down to grab my right wrist, while I simultaneously noted the airspeed indicator for the last time (85 knots). I looked in the mirrors at my copilot to see if he was ready. I pulled the ejection handle, noting that my bud was really surprised that I had said the "E-word". His body looked like a question mark.

Suddenly, there was a boom as the canopy left the aircraft. The cockpit was filled with smoke, and I

remember hearing water hit the sides of the ship as if I were out on the catwalk. At this point, time started to slow down dramatically. The .3 seconds it takes for the first man to eject seemed like the longest I've ever had to wait in my life. In my mind, I kept saying, "Go! Go! Get him out!"

Finally, a deafening loud noise sent my copilot out of the aircraft into the smoke-filled air. When he ejected, I was relieved that the system was working and that he would probably make it.

As I prepared myself for ejection, I waited another eternity for the next .4-second delay to pass by so I could get the hell out of Dodge. I remember saying, "C'mon, c'mon, it's my turn, let's go!" Finally, boom! It happened and a wave of relief flooded over me. I was afraid that the aircraft would hit the water before I got out. As I went up the rails, my head was forced down and I was staring at my boots in a cloud of smoke.

The aircraft was getting smaller and smaller with blue water all around it. I didn't recall seat-man separation, but for some reason I did know (don't ask me how) that my copilot had gone left. I don't remember the apex of the shot, but I do remember falling and hoping to feel the shock of my canopy opening.

When canopy shock occurred, I was again relieved even though it hurt like hell. I hit the water feet first on my left side. I looked to my left for my copilot and his chute, but couldn't see him at this point. I could hear the T-2 engines cracking as if a herd of buffalo were running through a field of firecrackers. I looked up in the air and saw the aircraft do a hammerhead stall to the right; it then appeared to be coming back toward me. Suddenly, my LPU began to inflate (I was in the water). I thought, "I should be doing something!" and IROK came to mind. The only thing that popped into my head was koch fittings. So I released myself only to look dead on at this huge carrier coming straight for me. I began to backstroke with all my might, knowing that if I didn't, the ship would run right over me. I swam

perpendicular to the ship's heading until I was clear of her bow. I could hear water splashing back to the ocean from the ship and I could see people scrambling from the flight deck and hangar bays to see if I was OK.

I heard people yelling, but couldn't understand what they were saying. I noticed that the parachute was still around me, so I reached for the koch fitting several more times. The ship passed by, then the helicopter began to set up for its approach. The diver jumped in, attached himself to me and the cable, and we were quickly hoisted up together.

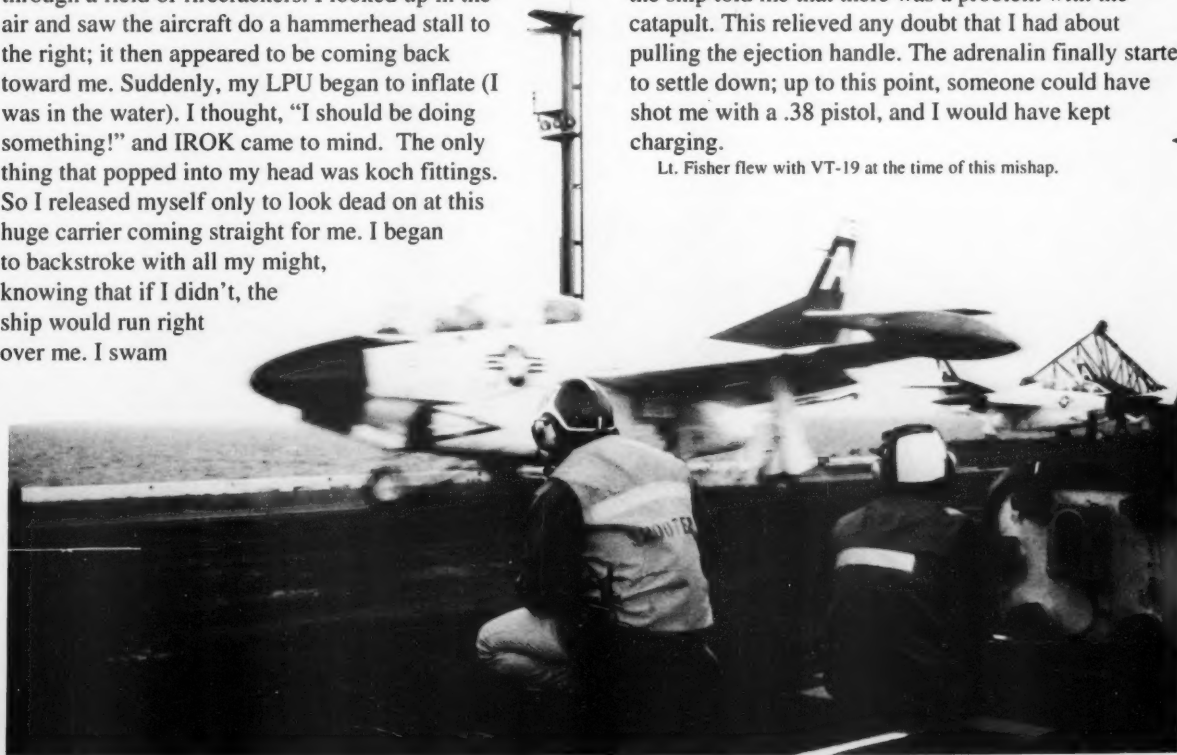
Once I was in the helicopter, they made sure I was OK and asked if they could look for the other guy. I quickly replied, "Yes!" But after 10 minutes or so, there was still no sign of my copilot. In the back of my mind, I was telling myself that if he hadn't been seen by now, there was little hope of rescuing him.

That's when doubts began to flood my mind. The thought that I might have killed someone made me sick to my stomach. Secondly, the plane went up after we ejected.

I thought, "Could it have still flown? Did I waste a perfectly good aircraft?" What I failed to realize was that the seats together weighed 1,400 pounds, along with the canopy at 300 pounds. Once gone, along with a drastic change in the aircraft's center of gravity, the aircraft was able to fly!

Four hours of endless examination and eleven vials of blood later, I found out what happened. The captain of the ship told me that there was a problem with the catapult. This relieved any doubt that I had about pulling the ejection handle. The adrenaline finally started to settle down; up to this point, someone could have shot me with a .38 pistol, and I would have kept charging.

Lt. Fisher flew with VT-19 at the time of this mishap.



Those Fuzzy Foreigners

By Lt. Eric Kennington



PH3(A) Stephen L. Batiz



PHC(A) D.W. Holmes, II



PH3(A) Stephen L. Batiz

It was a hazy Saturday morning with the sun beginning to shine though the fog on a smooth, chilly Adriatic Ocean. Visibility was about two miles. The HAC and I were waiting close by mother as plane guard waiting for the CODs to launch and recover before we embarked on our fuzzy foreign adventure.

We were to deliver three passengers to the French carrier *Clemenceaux*, then two passengers to *Ark Royal*, a Royal Navy helo carrier. Sounded like fun, something different. What could be so hard about landing on a foreign ship? The controllers spoke English, the decks were large, and we had all the HOSTAC diagrams. The LSE hand signals were almost the same.

I had done a bunch of passenger transfers, and this one should be just like all the rest, but maybe with a little accent thrown in. *Au contraire, monsieur.*

I checked in with *Clemenceaux* approach.

"Dusty dog 610 is 20 miles out on your 180."

After numerous "Say again" calls, we figured they were saying, "Six one zero, we are presently in a stratus cloud. Visibility is zero, steer 030 for carrier-controlled approach. Foxtrot corpen is 130."

The HAC and I looked at each other, puzzled.

"Did he say zero? Hey guys, feel free to speak up if anyone can understand what they're saying."

As we approached to seven miles the haze turned into a thick fog layer about 300 feet deep. We took the approach hoping the visibility would clear up as we descended.

The controller gave us three calls on the approach. First, he gave us a steer, then a descent, and lastly switched us to tower. No other calls followed and we couldn't see through the goo, so at a half mile (on the TACAN) and at 200 feet of altitude, we waved off the approach.

As we climbed out of the fog bank we could barely see the mast like a submarine's periscope cutting through the fog. We could see down through the fog, but when we were in it, we had no horizontal visibility.

The controller asked if we wanted to try another approach, but we declined. The visibility was just too poor. We tried two visual approaches only to be frustrated by a thicker portion of fog coming between us and the flight deck.

We circled at 500 feet wondering how we were going to accomplish our mission. The crewmen noticed a clearing ahead of *Clemenceaux* and we told the controller that we would attempt another visual approach as soon as they entered the opening. It was

just enough. The approach was steep and I backed the HAC up on airspeeds, altitude, and rates of decent as his scan focused more on the flight deck and LSE. We landed on spot "zulu" and no doubt our stiff-wing passengers had to be impressed.

On to *Ark Royal*. At least these guys spoke our native tongue.

The Royal Navy has a different way of landing helicopters. It is like parallel parking on an *Oliver Hazard Perry*-class flight deck. The LSE stands 90 degrees off your nose. He gives you normal hand signals, but something about seeing them off to your side is a different perspective. The landing was tight and we were all swivels as we squeezed into our spot. We landed right on the spot with four feet of clearance from the tail rotor spinning in front and from the deck edge to the left.

Time for takeoff. As I was reviewing the check list I noticed the LSE was giving us the raise signal with the chocks still on. Didn't we ask for chocks to be removed? Are the chains on there also? How could they remove the chains and forget about the chocks? Let's stop and start over. I signalled for the chocks to be removed and the LSE gave me a funny look, but complied. We lifted, slid left and departed.

Back in the ready room we discussed what had happened. What did we learn today? Are the French crazy by trying to give us a CCA in zero visibility, then asking again? And is the Royal Navy lazy by not removing the chocks on our takeoff? The answer is no to both questions. The French call it "lemon-yellow deck" and unless there is a break in the weather a CCA is mandatory. The British lift from their chocks to avoid accidentally rolling forward in tight conditions. Although we may do some things differently than the French and the British, everyone has their own safety threshold and practices. We declined another CCA and asked for the chocks to be removed, which were both different from what our NATO friends do, but were safe and familiar to us. In retrospect, there is probably a French and British safety representative writing about those silly Americans refusing a CCA and taking off without chocks, but we did the procedures that felt safe to us as they would when working with our ships. There is never a normal hop. Any flight can turn into a fiasco at a moment's notice. Be prepared, and use your crew coordination techniques. ◀

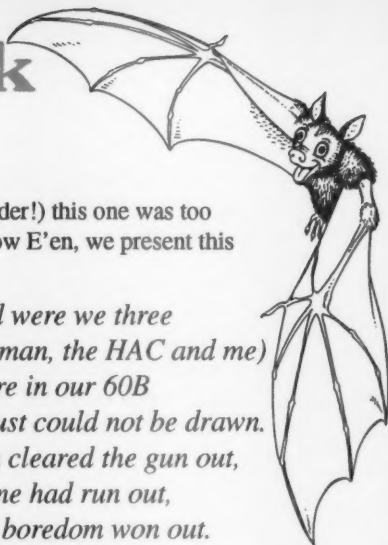
Lt. Kennington flies with HS-7.



The Seahawk

By Lt. Mike Curtis

We normally get queasy when contributors send us poems, but (shudder!) this one was too good to pass up. In honor of the spooks, goblins and spectres of All Hallow E'en, we present this effort based on Edgar Allen Poe's "The Raven".



Once upon a Med transition,
on a routine Seahawk mission,
Tracking ships and boats a-fishin',
whether small or whether big,
While I flew her straight and level,
far from nervous or disheveled,
Called the HAC, "That gun unbevel!"
Listen up, crew, here's the gig:
We will fire some rounds before
we RTB to mother FIG*."
Quoth the pilot, "Clear to rig!"

Ah, distinctly I recall
those fateful words that so enthralled
This H2P, for ne'er before
had I seen the gun unstowed!
On my lip I started biting
though we weren't engaged in fighting.
Still I found it quite exciting
to be rigged in such a mode.
With "Smoke away!" we had our target,
with the winds, we had our road.
Quoth the pilot, "Lock and load."

"Weapons free," the HAC then spoke
while rolling final on the smoke,
And sipping on his Diet Coke,
the evolution well in hand.
With the target profile rising,
first a shot and then surprising
Silence! I began surmising
what could cause such harsh disband.
Who the culprit that had ruined
the firing time we'd neatly scammed?
Quoth the crewman, "Barrel's jammed!"

*FFG

Quite frustrated were we three
(the aircrewman, the HAC and me)
When twice more in our 60B
the bullets just could not be drawn.
As the crewman cleared the gun out,
my adrenaline had run out,
Soon thereafter boredom won out.
Now the flight was just a yawn,
Just another Navy chess game,
Mom a bishop, we, a pawn.
Quoth the crewman, "Barrel's gone!"

Seems the crewman got all flurried,
and with the machine gun hurried,
Trying to fix the barrel, worried
'bout the time we had in store.
If from the front we had spoken,
said, "You needn't be so smokin',"
Then there'd be no barrel soakin',
soakin' on the ocean floor,
Down among the fishes, nowhere
near the Med's Plutonian shore,
Jammed and wet, forevermore.

While the barrel sank asunder,
as a crew we had to wonder,
Could we have escaped this blunder,
which we'd surely catch hell for?
More aircrew coordination
could have been our crew's salvation,
Handling the situation
slower than we had before.
'Stead we tried to do things fast,
as if someone were keeping score.
Quoth our aircrew, "Nevermore!"

Lt. "Poe Mike" Curtis flies with HSL-48's Det 2.

"Watch the Deck! Roll Left!"

By LCdr. Keith Menz

I had been an FRS instructor for 15 months, the last nine months spent as a tactics-phase instructor. As one of the more senior instructors, I was usually crewed with Cat I's who were having frequent problems in phase. It was refreshing to see the flight schedule, and see my name next to a Cat I pilot who was doing well.

The flight would be my first with this Cat I pilot. He had a good reputation, performing average to slightly above average. All reports were that he was aggressive, worked hard, studied the material, and was always prepared for his brief. His shortcomings in tactics came from losing sight of the bogey, especially on extension-pitchback maneuvers.

I had just finished the debrief from event 2, and walked immediately into the brief for event 3. A Cat II RIO gave a disjointed and poorly organized admin brief. My flight lead and I had to rebrief the specifics for my student's first 2 v 2 ACM flight.

After reading the ADB, and completing a detailed preflight, we took off and rendezvoused for the five-minute transit to the working area. We completed our combat checks en route.

We took Northeast CAP station, the bogeys the southwest station. With 35 nm separation, both fighters turned inbound with a staff instructor as TAC lead. We called, "Fight's on, recorders on."

High turn to engage the trail bogey, an F-5. The apex of the climbing turn was approximately 19,000 feet. After the first turn, the bogey had a slight advantage; however, about half way into the second turn, we became more



LCdr. Tom Prochilo

defensive as the pilot turned belly up to the bogey. I asked him if he had the bogey in sight.

"No!" he replied.

I called the bogey's position and my pilot saw him. We were extremely defensive and I called him to bring the jet hard right. He made a five-G nose low, right turn and I called, "Chaff, flares" on the UHF.

Airspeed bounced from about 330 knots to 180 knots. We continued in a 30-35 degree nose low, right turn. At 12,000 feet I told him to "Watch the deck. You've got 1,500 feet to play with." I expected a quick unload maneuver to build energy, then a pitchback into the bogey.

Turning back to the bogey, I saw the F-5 overshoot from right to left. I went back to the altimeter and saw us passing through 10,000 feet. I called "Terminate rocks kill" over the UHF radio. I thought that my pilot was fixated on the fight and failed to watch his altitude. I wanted him to stop fighting and return to level flight. The jet continued in a nose low, right spiral as I told the pilot we were out of the fight. We were in a nose low, right spiral at 160 knots.

I told him, "Roll left, level your wings and recover." With no reply, I again told him, "Roll wings level and pull." I was expecting a standard 17-unit recovery. Again there was no

response so I asked for AOA. The pilot said it was "broken." I instinctively realized this was wrong so I told him to put the "Stick forward and unload. My harness is locked." We were still in a nose low, right turn at 8,000 feet, at approximately 160 KIAS.

I again asked for AOA and told him, "stick forward, unload the jet." He again replied the AOA was "broken" and he had no rudder authority. He said he could not "make the jet come left." I remember looking at the wings and did not see any spoiler deflection. I do not remember any buffet or rolloff of the jet after the call to terminate. I looked at the TID but couldn't see a spin arrow.

All indications were that the pilot didn't have control. We still were loaded up in a nose low spiral well through the hard deck. At 5,300 feet, I called, "Stand by, eject, eject, eject!" and pulled the lower handle. I did not use the canopy jettison handle before initiating ejection. I had no problems on ejection except that I was hit above my left eye by what I suspect was my visor. My pilot was eventually picked up with minor injuries.

I inflated my LPA and deployed my raft before water entry. I also used the four-line release to steer clear of the wreckage. SEAWARS released my parachute. I swam to the raft and had to untangle it as the lanyard was wrapped around the raft. I removed the seat pan, turned off the ELT and climbed into my raft. The left upper and right lower lobes of my LPA slowly deflated. I probably punctured the lower lobe climbing into my raft.

I took out the PRC-90 to contact the on-scene commander on 282.8. I was in the water approximately 50 minutes. The SAR helo picked up the pilot first. I had the sea-dye marker deployed for ID by the on-scene commander and the helo. The SAR swimmer entered the water to aid rescue.

I have replayed this flight over and over in my mind, trying to see if there was something I could have done to prevent this mishap. I never saw any indication of a mechanical problem with the jet during the engagement, and I did not see a master caution light in the rear cockpit. I assumed that the pilot had become confused or disoriented in the nose-low spiral, which kept him from making the proper recovery control inputs. I also believe that he became task-fixated and didn't tell me what he was doing. He did respond to my questions about AOA but his answers were ambiguous. He did not elaborate on the units of AOA nor his attempts to recover the jet. At no time during the flight did I feel a positive unloading of the jet.

Several aircrew have asked what have I learned from this experience. I know I broke my briefing rules in the element brief. I let a rushed, disjointed brief distract me. I became more concerned about being 10 minutes late for our walk (can't be late for a range time) and did not conduct a one-on-one crew coordination discussion with my pilot about emergencies or out-of-control flight (OOCF). Lack of time is no excuse for this error. I should have made the time to conduct this brief. It is standard for all FRS instructors to emphasize tactical maneuvering, including high-AOA specifics, in the tactics briefs.

Secondly, I made wrong assumptions. I assumed with my "watch the deck" call that the pilot understood he was slow. I had given him a "250 knots" and "200 knots" call as the jet slowed in the hard right turn. With his "roger" on my "watch the deck," I wrongly assumed he was acknowledging both the altitude call and the fact we were slow. I then continued monitoring our defensive position and our altitude in the event of a "rocks kill."

Finally, I did not initially realize we were stalled. My first call after the "Terminate, rocks kill" was descriptive: "We're out of the fight, nose low, right spiral at 160 knots." I believed he was still fighting the F-5, watching the bogey over his right shoulder. He appeared to be fixated on the bogey and not watching his altitude. This was a typical Cat I mistake that I had seen on several occasions.

Looking back, I know my initial calls could have been clearer, but I do believe I provided my pilot with the most timely commands possible. I also think that having an AOA indicator in the rear cockpit would have dramatically helped me to analyze the situation. My high-AOA-OOCF training has demonstrated that a stalled F-14 can recover within 3,000 feet if the pilot places the stick full forward. I have practiced high-AOA maneuvering in the 2F95 simulator as part of the required AIRLANT spin-training program. The AOA will break from the stalled condition, airspeed will increase, and the jet will quickly recover. Level flight is then attained with a smooth 17-unit pullout.

This mishap clearly shows that crew coordination must include a precise two-way dialogue. Because of cockpit ergonomics, the RIO must rely heavily on pilot responses during OOCF. The lack of these responses or ambiguous information only complicates the situation. There is no time to play "20 questions" with the pilot. The time from my terminate call to the ejection was 12-15 seconds.

LCdr. Menz was an instructor RIO with VF-101 when this mishap occurred. He is currently flying the F-14B with VF-142.

I again
told him,
"Roll wings
level
and pull."

We had just completed a single-pallet VERTREP and were discussing options with the Tower for retrieval of the retrograde. The HCO suggested that we make an approach to a low hover to hand off the MAFs they had requested, then elevate to hook up the pallet and net. This sequence seemed a little odd because the ship was certified for SH-60B takeoffs and landings, but we agreed.

The low hover and MAF-handoff went smoothly and we positioned ourselves to hook up the load. That was when our troubles started.

As soon as the load was clear of the deck, it began oscillating wildly. Fearing for the safety of the deck crew, we moved away from the deck out over the water. We applied standard procedures for an unstable load with the PAC increasing collective (still in a hover) to apply positive Gs to the cargo, which should have stabilized the pallet.

Satisfied for the moment, we transitioned to forward flight. As we passed through 25 knots ground speed, the load began oscillating out of control and we tried again to steady it by reducing airspeed and tweaking in a little power. No luck. The pallet kept flailing around and the crewman, who was getting a little excited, told us that the load had hit the tailwheel.

Single-Pallet Flailex

By Lt. Robert Hauser



PH2 Dave Loveall

Enough was enough; it was time to pickle. The PAC tried to electrically open the cargo hook, but it wouldn't open. We wanted to jettison our albatross, and we fired the explosive CAD to force the hook open. End of problem? Not quite.

The load was so light that the air current was holding it against the open hook, preventing it from falling away. The crewman had to reach through the access panel in the deck and push the pendant clear of the hook. We later deter-

mined that the electrical release was OK; the load just wasn't heavy enough to cause it to open.

What happened? How did we let ourselves to get into this situation? First and foremost, not one member of our crew reviewed the VERTREP procedures and limitations outlined in NWP-42, which clearly states: "Warning: Do not hook an empty net to the helicopter without at least four wood or six metal pallets or an equivalent weight in the net. To do so would endanger the helicopter by allowing the net to blow into the helicopter's rotors..."

In the LAMPS Mk-III community, we are called upon to VERTREP so infrequently that we can't assume we know everything about this secondary mission. A few minutes spent carefully reviewing such publications as NATOPS, NWP-42 and HOSTAC may yield valuable information that would prevent embarrassing situations or mishaps.

If the procedure seemed a little peculiar to us, why didn't we ask questions? The ship was certified to land SH-60Bs and we could have easily taken the pallet and net inside the cabin. Although we discussed these concerns amongst ourselves, we never asked the Tower or anyone else. We definitely needed aggressive skepticism and (probably) common sense that day.

Lt. Hauser flies with HSL-46.

3



Pros of the Week? *No Way!*

By Lt. Chris Murray

Case 1, EMCON launch from the carrier. No TACAN, but a tight INS and DR navigation to keep us in the game. It was my second cruise, my pilot's first. As the mission commander, the responsibility for safe flight rested squarely on my shoulders, so I spent extra time briefing EMCON, which I considered to be the most important part of our mission. Following squadron SOP, we briefed in-flight emergencies, but didn't take a lot of time doing it.

After launch into a Gonzo station sunset, our INS dumped and we decided to stay overhead within visual range of the ship. With two hours to "hang on the blades", we proceeded to trade sea stories. in a tandem cockpit airplane, the worst things you can hear from the front seat on the ICS are comments like "Oh, no!", "Fire!", or various expletives. without any amplifying remarks. My comfortable flight overhead the ship was now being interrupted with an "Oh, no!".

"What's the problem?" I asked.

"Our flight-side hydraulics have dropped to 2,600 psi," my pilot said.

I broke out the PCL and we went through the procedures without a hitch. The F-14 has two hydraulic systems and a backup module, so we were far from being in extremis. But history has shown that hydraulic emergencies are serious business, so we broke EMCON, called for a rep, and recommended a pull forward for a ready deck.

Our rep concurred with our plan, and told us to switch button 16 for vectors to final. As I switched the radio and talked to CCA, we both started to here a banging sound, which we surmised to be the bidirectional (Bi-Di) pump cavitating. Our experience told us not to be surprised if this happened, so we complied with the PCL and secured the Bi-Di; the flight pressure then dropped to zero. We delved further into the PCL and did the procedures for zero flight pressure as we were hooked to final. We had normal lowering of the landing gear, main flaps (no aux flaps), and hook, so we were still in reasonably good shape.

After flying his ACLS needles in "world class" fashion, my pilot transitioned to the ball and flew it to touchdown.

"Bolter, bolter, bolter!" was the unexpected call from the LSOs.

A little nose down in the wires had bought us another trip around the pattern and a new discovery in the front seat.

"Combined pressure now reads 2,600 psi" was the pilot's next call.

We extended the refueling probe with pressure still in the system, fervently hoping we wouldn't have to use it. With our remaining PCL procedures complete, we told the ship that we wanted a short hook to final at four miles because of our rapidly degrading situation. At four miles on final, my pilot told me that combined pressure was starting to fluctuate, so I tightened my lap belts down a little more and asked him to keep scanning the gauge and keep me posted. My confidence in extended flight on the backup module was nil. I felt our best shot was to land safely on our next pass.

"You know what's really funny?" my pilot said.

"I can't think of anything," I responded.

"Well, this airplane responds normally despite having problems with the hydraulics."

We put his observation out of our minds and concentrated on the approach.

His second approach was a mirror image of the first, and he made me glad that I was flying with him. The relief was obvious in both cockpits as the 3-wire brought us to a halt. Before we shut down to be towed out of the gear, my pilot said that combined pressure now read zero!

I unstrapped and performed the postflight with visions of Air Medals and "Pros of the Week" dancing in my head. Much to our chagrin, the plane captain told us that both hydraulic systems were fully serviced. A maintenance inspection revealed that both pressure sensors for the gauges had failed, and we had been flying in a perfectly sound aircraft.

The flight taught us some valuable lessons. First, emergency procedures are required briefing items. The more time spent on possible airborne scenarios—whether as sea stories in the ready room or select NATOPS questions of the day during the flight brief—will pay dividends in the future.

Second, just because the PCL says a failure is possible with a certain degrade, don't talk yourself into making it so, as we did with our Bi-Di.

Finally, no matter how the aircraft flies normally, you still have to trust the gauges and do the procedures. Second-guessing the gauges is a major obstacle to becoming "Pros of the Week" and could result in "Goats of the Year!"

Lt. Murray is a RIO with VF-111.



SELF MEDICATION

**Read These Two Doses
and
Call Your Flight Surgeon in the Morning**

Common Sense

By Lt. Ted Mills

How many times have we heard it? "No self medication with over-the-counter products." Then watch the eyes roll after the AOM. Many aviators think, "That's what the flight surgeon says, but sometimes, you just have to use common sense."

I was lying awake one night with a stuffy nose and a cough. I hadn't been flying for some time and it seemed silly to go through the aggravation of sick call and a down chit. Time for a little self-applied common sense.

Several days later, we were CQing off southern California. No problems after the first two traps, but afterward, we blew a hydraulic line while folding the wings. The fluid ran out so fast that the brakes could not isolate and voila! We crunched the No. 1 engine into the nav pole.

We went below to be poked and prodded by the flight surgeon. I didn't even think about the cough medicine since it was well outside the 72-hour window.

As you might have guessed, the test results told the story. There was nothing in my blood stream and I was as healthy as ever. However, a chromatography test of my urine sample had the telltale signs. Fortunately, the incident was not even a Class C, and as the COTAC, I was never in direct control. But what if I had been? Would it have been worth the loss of wings, medical benefits, or someday maybe a pension?

Sure, the rule is strict, but there's a reason. Bypassing a little inconvenience is never worth the possible consequences.

Lt. Mills was a student with VS-41 and is now en route to VS-21.

A List of OTC Drugs

By LCdr. Paul Ephron, MC

"But what if I am sick over the weekend?"
"Why can't I just take some cold medicine—then on Monday I'll be good to go?"

Why do I have to see the flight surgeon?"

Every flight surgeon has heard these questions a thousand times in response to the rules about using over-the-counter (OTC) medications. OPNAVINST 3710 says, "Because of the possibility of adverse side effects and unpredictable reactions, the use of over-the-counter drugs by flight personnel is prohibited unless specifically approved by a flight surgeon." This does not mean you have to cough, sneeze, hack, and feel miserable from Friday evening to Monday morning. *It does* mean that if you use OTC drugs, you must consult a flight surgeon to make sure you're ready and able to fly before you fly.

The side effects of medications are many, and are often unpredictable. For instance, decongestants—such as Sudafed—can cause high blood pressure, anxiety, tremors, dizziness, throbbing headaches, or heart palpitations. Just the right combination for a night carrier landing! Aspirin can increase sweating, thereby resulting in dehydration. Aspirin can also increase the chance of

hypoxia, stomach upset, or even ulcer disease. Some OTC drugs can cause physiologic effects days after being taken. What you took Saturday might still be acting in your system on Monday or Tuesday.

If you are grounded, it may be from the adverse effects of the medication. However, it may be that the flight surgeon grounds you because of the condition that required the use of the OTC drug.

The Advil for that hangover (even though you drank your last beer more than 12 hours before) is not the reason that you shouldn't fly, but the fact that you are somewhat incapacitated is. The Afrin spray may not cause grounding but the sinusitis or the eustachian tube dysfunction might.

When using OTC drugs, the aviator is acting as the flight surgeon but without the requisite knowledge to judge someone's health or whether a particular OTC medication is safe to use before flying. I am sure that most flight surgeons are not going to ground every aviator who needs OTC medication, but they need to make that call.

OTC drug use is prohibited without permission of your flight surgeon, but as long as your flight surgeon OKs it, you can still take the OTC medication and remain on flight status. As Lt. Mills mentioned in his article, the rule *is* strict. I hope you can see that there are some good reasons why such a strict rule exists. No one wants to be sick. No one wants self medication to be a causal factor in a mishap. A simple check with your flight surgeon before or after using an OTC drug will ensure that this will never happen.

Here's a list of common OTC medications that are used with or without a flight surgeon's permission. Some of the side effects are listed with the medications. Did you know that such "safe" drugs could cause all these problems?

☐ Aspirin

—Acute allergic reactions (15 minutes to 3 hours after ingestion). These allergic reactions can occur even if you have never had a problem taking aspirin in the past.

- Ringing in the ears (tinnitus)
- Stomach upset or ulcer disease
- Hypoxia
- Hyperthermia

☐ Ibuprofen (Motrin, Advil, Nuprin)

- Acute allergic reactions
- Nausea, vomiting, diarrhea
- Stomach upset
- Dizziness, drowsiness, headache, confusion, heart palpitations
- Blurred vision

☐ Acetaminophen (Tylenol)

- Large doses can damage the liver

☐ Decongestant Sprays (Afrin)

- Irritability
- Insomnia
- Hallucinations
- High blood pressure
- Nervousness, tremors

☐ Decongestant Pills (Sudafed)


- High blood pressure
- Anxiety
- Tremors
- Dizziness
- Throbbing headache
- Heart palpitations

☐ Antihistamines (numerous names, used in most cold or cough preparations)

- Sedation and drowsiness
- Dizziness
- Lassitude
- Uncoordination
- Fatigue
- Tremors
- Increased tendency toward convulsions
- Dryness of mouth or throat
- Tightness of chest
- Heart palpitations
- Headache

☐ Cough Preparations

- many of these are combination medications and have decongestants and/or antihistamines
- Nausea
- Drowsiness
- Dizziness

This is just a short list of the more common medications used, but all OTC drugs have potential harmful side effects. Check with your flight surgeon before using any OTC, and cover your six. 

LCdr. Ephron is the flight surgeon for VS-41.

The author makes a good point: it's not just the medication but the underlying symptoms that down you. —Ed.



My Night Swim (

By LCdr. David Root

Most of the squadron was away on a detachment to Nellis AFB, leaving a small group of aviators (including me), troops and aircraft back at Miramar. The skipper had decided that while most of the squadron was flying good-deal ACM hops up in the desert, we of the Miramar contingent would build up the command's night hours for the month. I had just gotten engaged and had received orders to VF-124 as an instructor. I was on top of the world and nothing could burst my bubble, or so I thought.

I was the designated briefer for a night three-plane AIC. I wanted to expedite the evening's flying while still getting some good training. I planned and briefed supersonic intercepts, which would take at the most an hour-and-a-half for all three jets to use their gas and bingo back to Fighter Town.

The brief went well and included the customary one-

liner about SAR: "Do it if you have to." We broke up, suited up (why check the personal equipment?), read the aircraft discrepancy books, and launched.

After one run as the fighter, we climbed, turned around, selected full AB, accelerated to 1.3 IMN and headed south as the bogey. One minute into the run, we had a right fire warning light. We did the boldface procedures while turning back toward Miramar.

I thought, "No sweat, it's probably just a shorted sensing loop," something I'd seen a few times before. I was wrong. A couple of minutes later while trying to slow and descend, the right side of the aircraft erupted into a rip roaring fire. (A Lear Jet 50 miles away reported seeing a flaming meteorite). There was absolutely no doubt in my mind what to do next: I assumed good position and pulled the lower handle.

Everything I had read about time compression came



Off Miramar

true in the next second as I waited for the canopy and my seat to go. In what seemed an eternity, I saw the canopy jettison and blacked out as the seat left the aircraft. We ejected at about 24,000 feet, which later analysis showed gave me a 60-second ride in the seat before seat-man separation, and 15 minutes in the parachute. My brain had shrunk to the size of a pea but training had paid off as I automatically did all the necessary duties to prepare for a water landing.

After water entry, I ditched the chute and climbed into the raft. Both my pilot and I soon discovered that our strobe lights didn't work, losing what we thought would be the primary device that the SAR helo would use to find us at night. The batteries were dead and neither of us had spares. My pilot had also lost his helmet and flashlight on ejection.

Calling for the overhead aircraft to get an ADF cut,

my pilot gave a long count on his PRC-90. I backed him up with my flashlight and a pencil flare when we spotted our wingman. We had ejected 100 miles from the nearest land. Our wingman had already called "Mayday," assumed the role as on-scene commander and was coordinating with the warning area controlling agency, Beaver Control, to send a SAR helo our way.

An H-2 with degraded doppler (needed for hover) on deck at San Clemente Island, 100 nm to the north, got the call to pick us up. The H-2 pilot told Beaver that he wouldn't refuse the SAR call but that he was degraded and would be bingo fuel overhead the survivors.

Two Sea Kings, from the SH-3 FRS, had also answered the SAR call, having just taken off from NAS North Island. Amazingly, their mission that night was to practice night SAR. Beaver told them that another helicopter had already been assigned and they weren't needed. The on-scene commander was unaware of all of this, assuming the H-2 was the only available platform. Fortunately for us, USS *Truxtun* (CGN 35) was within 30 nm of our position and had started our way from the first SAR call. Monitoring the radio, *Truxtun* offered to recover the H-2 for refueling and allow it to complete the recovery of us poor, soaked fighter jocks.

The H-2 took 30 minutes to get us, doing an extraordinary job with their degraded aircraft. We then landed and refueled on the cruiser before flying to North Island.

I learned a lot from that night swim. While a lot went right—specifically, my being here to write about this story—I learned several lessons.

When was the last time in a brief, or during squadron training, that we really covered SAR, touching on the responsibilities of the on-scene commander and available local SAR assets? My one-liner in the brief didn't do it. As naval aviators, we always consider contingencies. Shouldn't we spend time training for SAR instead of waiting for our four-year aviation physiology refresher?

The SAR coordinator didn't use the best platform(s) and didn't tell the on-scene commander what was available. The on-scene commander could have "pimped" Beaver about available platforms, becoming part of the decision loop of what assets to use. Hindsight is 20-20. Don't assume anything.

Water survival and aviation physiology training is invaluable. When I could barely think I had this excellent training to fall back on.

Don't expect to keep all of your survival equipment after an ejection or to have it all work. Be prepared to use what you do have. You are allowed five pounds of extra survival equipment, use it! I now carry extra water and batteries. I also check my equipment.

LCdr. Root is a RIO with VF-154.

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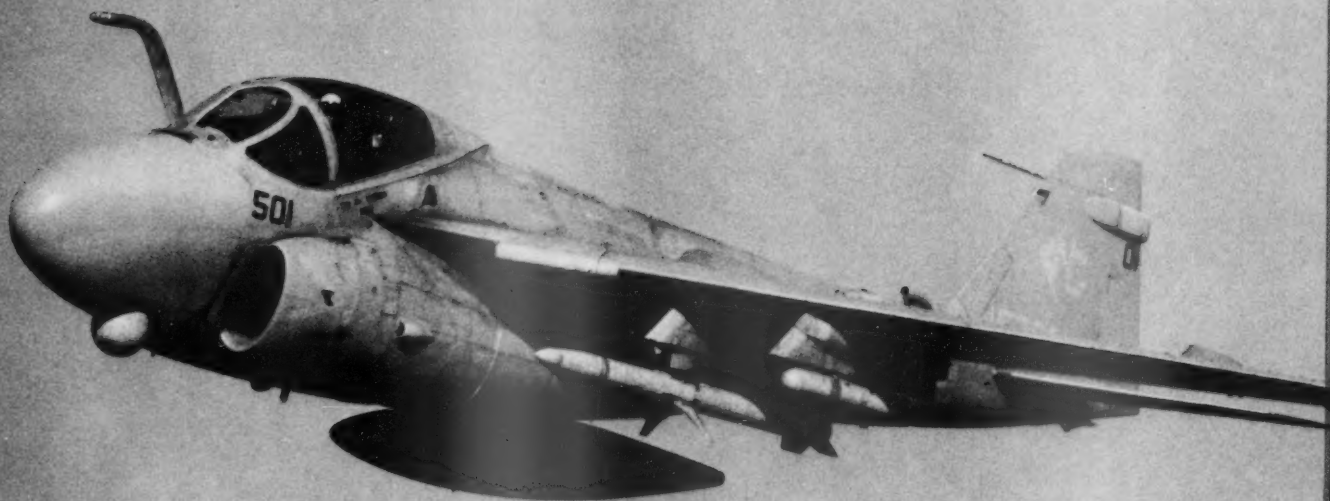
THE PAPER AND INK USED IN THE ORIGINAL PUBLICATION MAY AFFECT THE QUALITY OF THE MICROFORM EDITION.

Inverted,

Gear Up (or was that *Down?*)

Pass

By Lt. Ralph D. Lee



The flight would be short—1+35. Like many of our missions during Operation Southern Watch, we had our standard load of a HARM, IR Maverick, and GBU-12. But unlike most missions, we'd fly straight to the target, then directly back to the ship. We didn't have to tank. We had been in the Gulf for more than three months, and we were tired of 4+30 cycles.

Everything went fine. The weather was good and the haze was tolerable, which made our day even better. We could actually see most of the other aircraft in the Case I stack. All we had left was to slam onto the deck and get a slider.

We were Dash 2 coming into the break, and everything was still going well. Our lead broke, we waited 17 seconds and put on a 4-G pull. With the airspeed coming through 250 KIAS, we put down the gear and flaps. As we were rolling out downwind, the flight was suddenly no longer the pleasant and routine event that it had been. The nose and left main were down, but the right main indicated unsafe.

We were pretty sure that the indicator was correct because my pilot could feel a difference in the plane's handling. We continued in the pattern, which let the LSOs confirm the gear's position. On the waveoff, they said the right main was up and the doors looked flush. At this point, we started talking to our tower rep.

We were instructed to meet the tanker overhead for more gas, which would buy us some troubleshooting time. We cleaned up and met the KA-6 at 6,000 feet. Once we were plugged and receiving, everyone started breathing easier. We took the lead and started the PCL procedures. After our first try of applying positive and negative Gs, the gear still indicated unsafe.

We had the tanker come in close to see if they could find the problem. All that they could tell was the gear door was opening about four inches and stopping. After telling our rep what we had tried, we decided we would try to pop the gear from the clean configuration again.

The tanker came in one more time, close enough that we could feel him. This time the crew saw the problem. About four inches of the engine bay door was bent out, and the gear door was getting caught on the piece of metal. We told our rep. Nothing worked, and we were at the point of having to try the emergency pneumatic blowdown.

Neither one of us was feeling too good about our

chance of getting the gear down at this point. I had images from "Memphis Belle," which we had watched recently, running in the back of my mind. If 3,000-psi hydraulics couldn't get the door past the snag, we didn't think the pneumatic system would be able to do it, either. Since we would be committed to a dirty configuration once we blew the gear, we told the rep that was all we had left on the checklist.

We were just starting to coordinate getting more fuel before we attempted this, when the reps in CATCC thought of a rather strange idea. They wanted us to roll inverted and apply negative Gs, while lowering the gear at the same time. We were not quite sure how it would help at the time, but it didn't seem like it would hurt.

We climbed to 12,000 feet and then tried the maneuver. The first time, we didn't get the nose high enough. The ground-seeking nose of the A-6 lived up to expectations and we were past 250 KIAS before we had a chance to put the gear down. We recovered and set up for another shot.

This time, we parked it nose high, rolled inverted and pushed the negative Gs. The pilot dropped the gear, but it wasn't working; the right main was still stuck. At this point, he really pushed on the stick. It was the most uncomfortable amount of negative Gs I had ever experienced. We both had slightly bloodshot eyes after the flight. But those negative 3.5 Gs were able to snug the engine bay door just close enough to the fuselage, which allowed the right main gear door to clear the engine bay door. We suddenly had indications for three down-and-locked.

The tanker confirmed the gear was down and we came in for an uneventful straight-in and trapped. The deck was set up to rig the barricade, and we noticed all the ground support equipment was between us and the other aircraft. They pinned the gear and safed the weapons. Then we taxied off and shut down.

Later, we learned that the idea came from RAdm. Robert P. Hickey, Commander Carrier Group Seven. Most of the reps had felt as we did. They didn't see how it would help, but thought it couldn't hurt. When you're in a tight spot, but have the luxury of fuel and time, make sure you communicate with every expert available. There just might be some little-known bit of information out there that will make your day a whole lot easier. We overstressed the jet a little, but it prevented a Class A mishap.

Lt. Lee flies with VA-165.

Why Is My Finger on the Totalizer?

By Ltjg. John M. Kormash



LCdr. Tom Prochilo

My first REFTRA, 200 hours in the Tomcat, 40 traps under my belt. I was invincible!

After a thorough brief for a night bombing mission, consisting of two Tomcats and two Hornets, we walked to our jets. On the flight deck, the stars were clearly visible, no moon though. Taxiing to the cat, the CADC decided to take a short nap. A quick circuit-breaker drill cleared the problem and we launched.

Off the cat, the CADC and associated lights reappeared...not a problem. Cycle the breakers and we'd be hurling our Tomcat at the dirt with our blue death. This time, the drill didn't work. Sure, this item was on our minimum essential equipment list for flight and we would be able to continue our mission, wouldn't we? We went to our rendezvous altitude to troubleshoot, but no luck. The PCL presented a list of items that "may be affected" by this system failure, none of which seemed critical to safety of flight. After 20 minutes of troubleshooting, we decided to have the others press with the mission while we remained overhead and wait for our scheduled recovery.

A switch to marshal confirmed the recovery from the earlier launch was in progress and brought up the idea to try to get back aboard now.

"Roger 101," the ship called, "fly heading 180, take angels 1.2." In our descent we noticed the ship had found an overcast layer that appeared to be at 800 feet.

"101, turn left 340 degrees, intercept final bearing 355 degrees."

Twelve miles out, no problem, dumps coming on. We were 6K above max trap. At 10 miles we went dirty. No bullseye on the TID yet, but the pilot probably has it. Five miles, no needles or bullseye.

"101, final lock-on four miles. Call your needles."

"Negative needles," I replied, "negative bullseye."

"Roger 101, this will be a mode 3, above and on course".

We then remembered the gripe in the book about the lack of needles on the past two night flights, but the ILS had worked. We also had not been impressed with the controllers' finesse on mode 3s over the past three weeks.

"Not a problem," I thought, "a self-contained will get us there."

The TACAN showed us on final bearing and the altimeter showed us right on for 2.5 miles. The control-

ler remained quiet for an unusually long time. We could see he wasn't going to be much help. Hey, why is my finger on the totalizer? Uh, oh.

"You turned the dump off, right?" I asked.

"It is off now," my pilot said.

Bingo was 4.2 for Toms. We were now 4.5. Just inside 1.5 nm, we broke out below the overcast at 600 feet.

"Paddles contact, you're low."

What? How can we be low? The altimeter showed us right on for 1.5 and a steady 600 VSI had held us on from three miles.

"Don't go any lower," he called next. After glancing at the ball at a mile, it indeed was low. A "power" call brought us up, then at half a mile, the DLC kicked off. Nice. From low to clara high. We had the full range of ball movement this pass. The remarkable thing was that we caught the 4-wire out of this debacle. Now, we had almost no nosewheel steering and needed a tow tractor.

The debrief produced a few lessons learned. We never made the required call about still having six unexpended Mk-76s. The reason we were so low was that the altimeter was one of those systems "that may be affected" by a CADC failure (no reset mode). Even though the "stby" flag was in the window, we had not put in the correct setting. We had been almost 150 feet below the glideslope each half-mile altitude gate on the self-contained approach. We only had 10 degrees of nosewheel steering on deck because of the rudder authority light that had appeared during the approach as a result of the CADC failure. What if we had gone single engine? Had the rudder stops been commanded to 9.5 degrees of movement available and not been checked? A break-down in crew coordination led to the dump staying on longer than planned. These lessons learned were humbling and obvious now, but at the time could have really bitten us.

Remember those items that are affected by a "box" failing and how they can affect you later. When we started to feel behind the aircraft, there was no reason to continue the approach. We should have cleared the pattern, requested a turn to downwind then a hook inbound when we got comfortable with our situation or... we should have binged to the beach. ◀

Ltjg. Kormash is a RIO with VF-213.



I Might Lose This One!

Actually

By Lt. Craig M. King

I was talking to myself in the cockpit: "I can't believe this is happening. I might actually lose this one." And to think only two hours earlier we had a seemingly good plan for a simple TA-4J cross-country from NAS Pensacola to Randolph AFB, Texas. The weather was marginal, but not bad. The jet held more gas than we needed, and my student was an above-average performer. What could go wrong?

We started out that Friday morning over at base ops with a brief and a check of the student's DD-175. No problems. His jet cards were right on the money, confirming that we had enough gas to fly to Randolph and on to our divert, and still land with more than 1,000 pounds. That's why I wasn't concerned when the weather briefer told us the ceilings at Randolph were at 700 feet and forecast to stay that way all day.

We chose NAS Corpus Christi as our divert because it was forecast to be better than 3,000 and 3. The only reason the 700-foot ceilings should have been a concern was that Randolph does not have a PAR. The TACAN approach was the only way to get in there with mins of 500/1 1/2. I figured even if the ceilings dropped I'd just zip over to Corpus, which was 130 miles away. Heck, I had friends there.

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The flight went as planned all the way to Texas. We never saw the first cloud but saw the low overcast creeping in as we closed in on San Antonio. The student switched up ATIS and it confirmed what our Dash 1 had predicted: ceilings were at 700 feet with good vis below and some rain showers in the area.

We shot the TACAN approach down to mins and didn't even come close to breaking out. The ceilings had dropped to well below 500 feet. Still not a problem because we had more than enough gas to get to Corpus. We momentarily thought about trying the PAR up at Bergstrom, just 10 minutes away, but vetoed it thinking that if we didn't break out there we'd be in a hurt locker for fuel to divert. We chose to go to Corpus where the weather was forecast to be VMC. Life was still good and a weekend with my old fleet buds sounded like fun.

During the 30-minute trip we stayed down at 10,000 feet since fuel wasn't a concern. About 15 minutes into it, my student asked if he should call Metro and check the weather. I told him, "Sure, why not? It's a good habit to get into." I was confident the weather was still good at Corpus as forecast.

When the Metro guy came back with current conditions of zero-zero, I was stunned. How could that be? We asked for Beeville—zero-zero. Kingsville—zero-zero. Ellington—zero-zero. In fact, the whole eastern part of Texas along the coast was zero-zero all the way into NAS Chase. Of all the places we checked, only Bergstrom had ceilings above 200 feet (Hmm, I guess I should have gone there in the first place). They were calling it 400/2 in rain showers and getting worse. Unbelievable!

I declared minimum fuel with the controller and asked for an immediate turn direct Bergstrom. He didn't react and tried to make me go down to 5,000 feet. This guy was busy. Apparently the fog had rolled in unexpectedly and caught a lot of folks airborne looking for divers. I was a minor problem to him. My student and I figured out our bingo to Bergstrom and we were only about 200 pounds above it. At this time I declared emergency fuel. That got the controller's attention and I got direct on course at my bingo profile.

We had about 140 miles to go, which was approximately 30 minutes of flight time. It seemed like a five-hour journey as I watched the fuel steadily march down toward zero. We figured and refigured our fuel at least 20 times, and we'd be on final with 900 pounds. If we didn't break out we'd be out of ideas and places to go. I would have given my right eye for a tanker to squirt a thousand pounds of JP to me.

To make matters worse, the weather was steadily deteriorating along with my fuel. ATC knew my predicament

and was giving updates on Bergstrom's weather which was now down to 300/1 1/2. This is about the time I started talking to myself.

I could see the headlines. "Navy Jet Runs Out of Fuel on Final". I already knew that if I didn't break out at mins, my only option was to take it down to 10 feet AGL if necessary. This just could not be happening to me!

We did an idle descent right onto GCA final. The controller told me I was too close and high and to do a 360. I made it quick and held the gear until we were on glidepath. At 300 feet we were still in the goo as I strained for any sight of the runway. By now I was having entire conversations with myself and asking God for a little help here (I even threw in an appeal to Buddha just in case). At 250 feet I saw the rabbit lights.

We touched down in a rainshower; the low-fuel light was flickering as we rolled off the runway. We had approximately 550 pounds of gas. I couldn't remember the last time I was so happy to land. There was much rejoicing in the cockpit... that's when I remembered I had a student back there. Life was good again although it took about three hours before I stopped shaking. The student and I could only stare at each other and shake our heads. We had cheated death and were in no hurry to try it again.

Looking back, I was having a hard time thinking of anything we had done wrong. We had fulfilled all the OPNAV requirements, the weather was forecast to be above mins, our alternate was supposed to be VMC, and we had plenty of gas. What could we have done differently? Then two things occurred to me.

First, I was rather cavalier with my gas once airborne. When we operate around the boat we hoard the stuff as if it were gold. Once we're back in CONUS we tend to think less about it. Yes, we plan for it but it just doesn't seem as critical. A little throttle discipline early in the flight can get you out of some unexpected tight spots.

Finally, I was lucky to have the student along. Doing his student thing, it was he who suggested calling Metro in the first place while on our way to Corpus. If he had not we probably would have gotten within 50 miles of the field before finding it was zero-zero and would not have had enough fuel to make it back up to Bergstrom. Always check your weather airborne. I believe it is part of most penetration checklists.

I gained a new respect for the weather that day. We put a lot of faith in the weather guessers, but Mother Nature is unpredictable on a fairly regular basis. No matter how well you've planned, hold a little something in reserve for the unexpected.

Lt. King is a T-2 instructor with VT-86. He flew A-6s with VA-34.

Larry, Moe and Curly

Go to the AIR SHOW

By Capt. Terry L. Hannigan, USMC

Terry Hannigan



We were on a two-week det to Albuquerque. The high-altitude desert around Kirtland AFB offered an outstanding opportunity for hot-and-high flying, NVG routes in the mountains, and .50-caliber-gun shoots at the White Sands Range. The deal was also coupled with an air show appearance in Louisiana on the way, which created a lot of excitement and anticipation in the squadron. We planned a six-plane det with the CO leading the charge.

As our day of departure neared (a Saturday morning), the only problem appeared to be thunderstorms from a front passing through Georgia. Even if we didn't encounter any thunderstorms, the forecast called for very low ceilings and solid overcast. No sweat, right?

Our plan called for the lead section of two CH-53Es to fly ahead of the rest of the flight. If the lead section found unpassable IMC, they would turn out of it, warn the division behind them, and we would all remain VMC until we picked up single-ship IFR clearances. This fit the "reasonable man" approach that our skipper liked to use.

Our preflight brief included a roomful of very experienced aviators, including the assistant MAW commander (an O-7), our MAG XO (an O-6 soon to become the MAG CO), our squadron's operations officer and the DOSS (both majors). We also had at least two WTIs.

With the brief completed, we launched. The North Carolina skies were clear and beautiful. The CO was in the lead aircraft. His section included the one-star and our ops officer. The rest of us were in trail, a few miles behind. I was in Dash 3 of the division.

Since we had spare pilots, I and another HAC would split the HAC and section-leader time. I rode in the back during this first leg, an excellent chance to take a nap.

About two hours into the flight, I woke up after something just didn't feel right. I went up to the jump seat and sat down. The clear skies had given way to a dark, ominous front of clouds over Georgia. As briefed, the lead section called the IMC, but said it wasn't too bad. We flew on.

As we went into the clouds, the lead section announced that the IMC was getting worse and that they were turning around. They were now headed back toward us. Our division lead, in Dash 2, called for us to turn back. The result was a *hard* left turn that brought all four of our helos very close to each other. I remember our aircraft not only turning, but doing a nose-high quick stop to stay out of another 53's way. IMC overruns and underruns are not preferred maneuvers! Somehow, we all regained VMC without any further problems.

What next? Did we file those IFR flight plans? Nope.

We tried to punch through the clouds again because somebody thought he saw an area that was clearing up—the classic sucker hole. As before, no luck. Fortunately, we turned around again. By this time, whatever VMC we had was disappearing.

The sucker holes were all closing up rapidly. So, for the third time, we went back into the clouds. The visibility was getting very bad, very fast. Our HAC and copilot (a new lieutenant fresh out of the FRS) were busy playing dodgeball. I was in the jump seat digging out every IFR publication I could find in the nav bag.

This time, I remember seeing our wingman, on our right, slightly behind and beneath us, disappear into a solid gray layer. Just before he vanished, I thought I saw him turn left toward us. I can't describe the feeling I had in the pit of my stomach for those agonizing seconds. When he reappeared, he was on our left, in front of us.

At this point, the cluebird landed. Everyone in the flight switched up approach frequencies. The ATC folks got us all dialed in on the same freq within seconds. The same controller, enjoying a nice, quiet Saturday morning, now had our entire flight to deal with. His calm, composed southern drawl was reassuring. I'll never forget his first words.

"Listen y'all. I've got six helicopters, with similar callsigns, wantin' to do the same thing. Now everyone be real quiet and do what I tell ya." I don't recall anyone being more calm under pressure than this man, vectoring Larry, Moe and Curly out of harm's way.

The lead section somehow regained VMC, but couldn't convince anyone to join them. All four of the division's helos took vectors for single-ship approaches into Robbins AFB. Once we had all shut down, we exchanged sheepish grins. We waited for the weather to improve before going on. That night, when we had arrived in Louisiana, I expected everything to hit the fan, but no one said anything. I think we were all so embarrassed that we didn't know what to say. It was weeks before we even discussed the flight in small groups.

How could all this happen with a plan and all that collective experience? I think nobody wanted to look bad. There was too much I-can-hack-it out there. We were fortunate to get through unscathed. It would have taken only one pilot calling, "Knock it off," to have broken the chain.

If you have a plan, stick to it. Don't let perceived pressure, or the feeling that things will be OK, cloud your judgment. Brief what you're going to do and then do it. Take a lesson from the Three Stooges and the cloudy day. ◀

Capt. Hannigan is currently assigned to HMM-162.

BRAVO ZULU

Lt. Timothy B. Rooney
Lt. David M. Smith
VF-84

Lt. Rooney (pilot) and Lt. Smith (RIO) were close to completing their double-cycle night CAP in support of Operation Deny Flight over Bosnia-Herzegovina. The crew had just left a KC-135 tanker over the Adriatic and were orbiting near Sarajevo when Lt. Rooney noted a left oil-hot light on the caution advisory panel. Although the crew used NATOPS procedures and put the needle on the nose towards their carrier, the situation deteriorated rapidly. Oil pressure in the left engine began to decrease rapidly, with an associated oil-pressure light illuminated as the pressure dropped below 25. As the oil pressure continued toward zero, Lt. Rooney secured the left engine.

The pilot turned southwest while Lt. Smith worked out the exact heading to the nearest feet-wet point and told their Hornet wingman about the problem. The F/A-18 pilot joined and, using his night-vision goggles, confirmed that fluid was leaking from the left engine nacelle.

Going feet wet, the F-14 crew called USS *Theodore Roosevelt* (CVN 71). To add to their difficulties, the area weather was poor. Both the ship and their briefed divert fields were under a warm front with numerous cloud layers and with ceilings at as low as 800 feet. Visibility at the ship was restricted to approximately one-half mile in heavy rain.

After completing single-engine cruise procedures, they de-

scended through the cloud layers and moderate turbulence while discussing their options with squadron personnel on the ship. Although divert fields were available, they lacked arresting gear and had relatively short runways, which made that option unattractive.

Besides the weather, the crew also had to deal with an F-14A loaded with two Sparrows, two Sidewinders, a TARPS pod, an expanded chaff adaptor and FAMMO. Following intense deliberation, they decided to recover onboard the CVN.

Victory 216 was vectored to an extended downwind and, after a discussion with squadrons reps, Lt. Rooney restarted the left engine to provide crucial additional idle thrust.

At 13 miles, Lt. Rooney dirtied up and told Lt. Smith that the left engine indicated 5 psi on the oil-pressure gauge. Lt. Rooney was able to easily trim the aircraft with the extra thrust of the left engine at idle. After an initial drop lock, the Tomcat crew reported good ACLS needles at 6.5 miles. Just moments later, however, the left engine seized!

Lt. Rooney struggled to control the aircraft by immediately adding military thrust on the right engine and feeding in full right rudder to counter the extra yaw that had developed because of the seized engine. At 1,200 feet MSL and 5 nautical miles, it took military power just to maintain the 12 units AOA that NATOPS specifies for single-engine in the pattern.

As he tipped over at three miles and began their descent, Lt.

Rooney continuously fought the left drift with full right rudder and made power corrections to maintain the NATOPS-specified 14 units AOA on final. Arriving at three-quarters of a mile, the pilot called, "clara," because of the poor visibility. While the ship's lights were visible intermittently, the windshield air could not compete with the driving rain.

Paddles immediately called, "Paddles contact," and, "Right for lineup." At one-half mile and slightly above glideslope, Lt. Rooney picked up the centerline strobes and made an in-close lineup correction to an OK 2-wire.

Postflight inspection revealed an oil-bearing failure and a subsequent loss of engine oil. The engine seizure resulted from loss of oil and a left gearbox failure. ◀



Left to right: Lt. Tim Rooney, Lt. David Smith



Left to right: Capt. Charlie E. Robinson, USMC; 1stLt. William E. Moryto, USMC; Cpl. Brook R. Tolbert, USMC; LCpl. Michael A. Spear, USMC

Capt. C.E. Robinson, USMC
1stLt. W.E. Moryto, USMC
Cpl. B.R. Tolbert, USMC
LCpl. M.A. Spear, USMC
HMM-266

During the landing transition after a troop lift, the CH-46E's upper-boost actuator for the collective hydraulic failed, which caused the aft-rotor system to drive to minimum pitch. The aircraft entered an extreme nose-high attitude and hit the ground, tail first. The airframe broke apart at station 410 and burst into flames.

The helicopter came to rest on its belly with the forward rotors turning less than four feet above the ground.

As Capt. Robinson (HAC) and 1stLt. Moryto (copilot) made an emergency shutdown, Cpl. Tolbert and LCpl. Spear physically restrained the eight passengers on the cabin floor, trying to protect them from the drooping rotor blades, subsequent fragmentation and flames.

Once the rotors stopped turning, the two crew chiefs safely evacuated everyone without serious injury before the fire destroyed the helicopter. ◀

Maj. Frank Delahanty, USMCR
VMA-131

After he was cleared to engage the drogue, Maj. Delahanty made a stabilized approach to the KC-130's basket. As he engaged the hose, a huge sine wave formed as the hose-reel response – which had been checked before the engagement – failed. He made an emergency breakaway but couldn't disengage before the sine wave snapped the hose completely.

Maj. Delahanty backed his A-4M away from the tanker with the drogue basket and an 8-foot spring still attached to his aircraft's probe. The Skyhawk's engine ingested the fuel as it sprayed from the hose, causing the EGT to momentarily approach upper limits.

Bringing his power to an inter-

BZs require an endorsement from the nominating squadron's CO and the appropriate CAG, wing commander, or MAG commander. In the case of helo dets, the CO of the ship will suffice. A 5x7-inch photo of the crew by a squadron aircraft should also accompany the BZ nomination. Please include a squadron telephone number so that we can call with questions.

mediate setting, Maj. Delahanty headed toward his base. Although his wingman couldn't see any further damage, Maj. Delahanty chose to fly a precautionary approach to a field-arrested landing.

Throughout the approach, the spring slapped the A-4's canopy and the forward fuselage, but the basket remained intact and attached to the probe.

Postflight inspection showed scrapes and scuffs on the aircraft's paint along with a FODed engine. Maj. Delahanty's decision to use a single power setting kept the engine from sustaining any more damage.

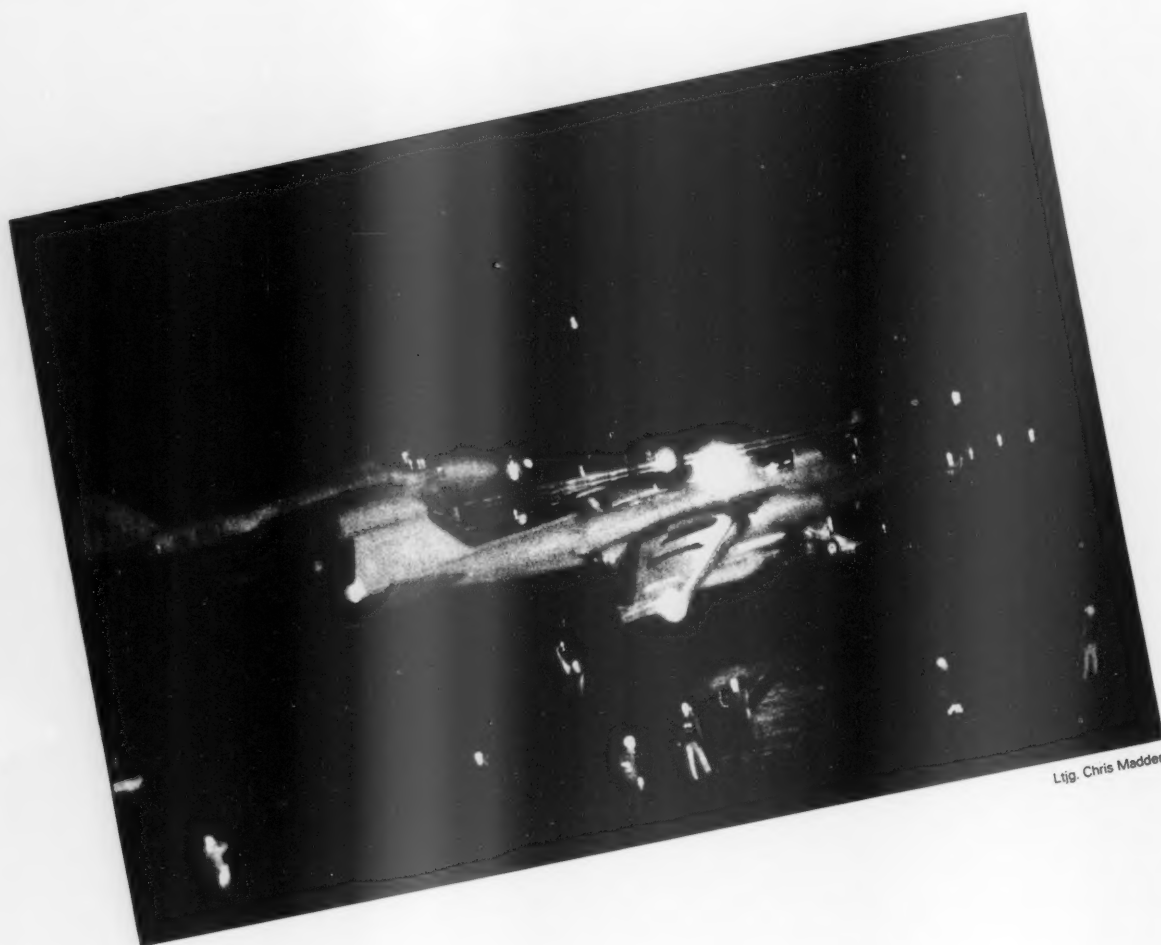
The Skyhawk's engine was changed shortly after this incident, and the aircraft returned to service. ◀



Yes, NFOs Have a

By Lt. James Rentfrow

Seat of the Pants!



Ltjg. Chris Madden

I have always disliked cat shots. It's one thing to put your life in the hands of a pilot landing at the boat, but it's another thing entirely to trust a machine to hurl you off the pointy end at 130 knots knowing the entire time that you only have a split second to recognize a problem, analyze it, and get out of the plane before you are out of the envelope.

I hate cat shots on pitch-black nights. It was on just such a night that we manned up our EA-6B for a two-plane ESM mission. During preflight, I noticed that the stby/reset knob was missing from the aft altimeter. The knob had been MAFed as loose, and the other back-seater told me that it had been removed as a potential FOD hazard. I accepted this explanation, and we continued the preflight checks.

The rest of the preflight and startup went OK, and we taxied to the cat. I gritted my teeth for what I considered to be the scariest portion of the flight. Boom! Off we went, with a reasonable amount of end speed. As we climbed through 400 feet, I began to breathe... another successful shot.

Suddenly, my attention was drawn to the altimeter as it went backwards through 200 feet; the airspeed was bleeding off past 100 knots on its way to zero. I looked outside to try to see the water, but could only see my reflection in the canopy. It was completely black outside.

I sat up straight, and elevated my chin. But, in that brief instant, I decided to stay with the airplane, which the pilot flew away using 10-degrees nose-up attitude and the radar altimeter.

What happened? Subsequent discussion with another squadron aircraft (after we had climbed for about five very silent minutes) told us that the stby/reset knob stem is actually a part of the pressurized pitot-static system... something that I had never considered. When our ATs removed the knob, the system pressure was allowed to bleed off a tiny bit at a time, until it failed completely on the cat shot. The altimeter, airspeed and VSI went to zero. Some electrical tape and applied thumb pressure over the hole pressurized the system long enough for an uneventful CV recovery.

Why didn't I eject? This disturbing question stayed with me long after we recovered. We had met all requirements for the ejection that we discuss in every crew emergency brief, but none of the four people onboard our Prowler ejected. Was it that I hadn't evaluated the situation fast enough and, if so, what would I do if we really were losing altitude?

The answer is simple: the airplane felt good. I knew, through my ears and the seat of my pants, that the engines were functioning normally, and that we were flying away from the water. I trusted my senses rather than my instruments.

Our maintenance troops, as much as we admire and have faith in their skills, are not the final word in procedures. There is no substitute for good aircrew systems

knowledge. In this instance, everyone from the junior AT who removed the knob, to the maintenance control chief who okayed the work, to the aircrew, had a less-than-appropriate knowledge of the pitot-static system. Fortunately, a senior officer in the other airplane had seen this situation before and was able to tell us how to correct it. If he hadn't, our pilot would have tried to shoot the approach with no pitot-static instruments.

There is no excuse for not going over ejection criteria every flight. Know them cold. You never know when you'll use them.

Finally, as we are so often reminded, NATOPS is not a substitute for good judgment. If our crew had trusted our instruments (at least what we have available in the back seats), we would have at least ejected the back two crewmembers, and possibly command-ejected the entire crew, ultimately losing a \$60-million aircraft for want of a knob.

Seat-of-the-pants flying is a difficult art for an NFO, since he doesn't have a stick and throttle. But that doesn't mean that he shouldn't trust his abilities and air sense. Review your procedures constantly, and when the time comes to get out, you'll know it. ◀

Lt. Rentfrow flies with VAQ-138.

Blown Tire

Off the Cat

By Lt. Zack Henry



I've been in the squadron only a few months, but I've flown the CAP station several times. This time, however, the mission requires special reconnaissance. My mind races over procedures.

The start is normal, and the deck crew breaks me down. I taxi to cat 3 for a day Case III departure. Visibility is marginal. The cat stroke feels good and the numbers in the HUD look fine.

"411, airborne," I call. I raise the gear and poof, into the goo.

Thump, thump, thump.

What's that? Sounds like the nosewheel is shimmying. Gear indicates all up. I can still hear the noise. Better pull up the engine page on the DDI.

An A-6 driver calls, "Tower, looks like the aircraft off cat 3 just blew a nose tire."

Oh, great! Sounds like the A-6 on cat 2. Well, engines look good. Double-check the gear. Still looks good.

My lead in 402 is on cat 4 ready to launch just after me.

"402," I call, "did you hear that?"

"Affirm, watch your fuel. The ship just drove into a fog bank. I can't even see cat 2."

"The engines look good," I say. "I'm going to 13,000 feet overhead and hold."

"Roger. I'll join on you."

Thump, thump, thump.

This doesn't sound too wonderful. I think I'll keep her slow.

I climb to angels 13 overhead and wait for my lead.

OK, let's get those drop tanks to transfer. 402 joins to look at my situation.

"402 to talk to rep."

"402, rep. Go ahead."

"Looks like 411 has about three feet of tire hanging out of the nose-wheel door."

"Stand by, 402. I'll talk to the skipper."

Meanwhile, my lead comes up on comm 2 and tells me to start thinking about procedures for a FODed engine.

OK, landing with a blown tire: arrested landing and anti-skid off. Done. Now, single-engine: half-flap approach. Don't get underpowered, turn into good engine, balanced flight. Did I forget anything? Let's see. Max trap: 3.9. Dirty bingo is on my card. I've got some slop. Uh, oh, single-engine and dirty: 3.7. Not good.

I can hear the ship launch the spare, the XO in 404. The recovery tanker has left the briefed station 40 miles away to rendezvous with us overhead.

"402, rep."

"402, go ahead."

"Skipper says to drop the gear, but have 411 bring the left engine to idle first."

Engine page to the left DDI, throttle to idle, here it goes.

"Left engine is at idle. Here comes the gear," I tell lead.

Dunk, dunk, dunk.

Three down-and-locked. Engine instruments normal.

"Engine looks good," I report.

"The piece of rubber is still attached to the tire," lead says.

I call Departure. "411 for immediate recovery with a blown tire." I need to reduce my gross weight. The airborne tanker has joined on us and recommends that I be the last to recover because I'll FOD the landing area.

Good idea. Secure dumping.

By this time, the XO has also joined up, relieving 402, who detaches. Engines still look OK. Damn! The drops aren't transferring.

"XO, I've got another little problem. My wing drop tanks aren't transferring."

"OK," he replies, "try raising your hook."

That's right. How did I forget that? Externals won't transfer with both the gear and hook handles down.

"Thanks, XO, they're transferring now."

OK, let's get that gross weight down. Don't forget the hook and don't bolter. Remember, the plane still flies normally.

I am settled down now and on a fairly normal approach, so I detach 404. Good needles, drops completely transferred, at max trap, hook down. So far, so good.

CATCC calls. "411, three-quarters of a mile, on and on, call the ball."

"411, Hornet, ball, 3.9."

Needles show me a little high ball. Hey! That's a full ball low.

MOVLAS. OK, forget the needles,

add power, fly the ball.

I trap the 4-wire, giving the skipper a minor heart attack. The tire separates on landing, but miraculously doesn't FOD the engine. I shut down in the landing area.

Things can snowball at the ship. A blown tire can FOD an engine, causing a single-engine situation with fuel problems, as well as weather problems if the ship drives into a fog bank. Don't fixate on the mission on takeoff. Take things one step at a time, and don't overlook even the smallest detail. No matter how much experience you have, it's comforting to have another head up there with you to help double-check every decision. Fly a normal pass and fly the ball. The LSOs will get you aboard.

By the way, I did get a nice piece of rubber tire from maintenance as a souvenir.

Lt. Henry flies with VFA-87.

**Don't forget
the hook
and don't
bolter.
Remember,
the plane
still flies
normally.**



By Capt. Martin G. Rollinger, USMC

It was a beautiful Caribbean evening. While I sat patiently behind cat 2, I was bounced around a bit by the aircraft launching in front of the JBD. The skipper (my wingman for the day) questioned the Tower's current altimeter setting. I confirmed the setting and noticed how my barometric altitude was varying wildly because of the jet exhaust that was ruffling my plane.

Down went the JBD, and I taxied forward, completing my takeoff checklist. Arm-up, tension, wipe out and salute, all went without a hitch. The catapult fired and I went down the catapult track, lighting the afterburners about half-way down in accordance with our SOP. At the end of the stroke, the aircraft gave me an aural AOA tone even before I left the deck. Once clear of the bow, my Hornet pitched violently nose down. Time to execute the immediate-action procedures for "settle off the catapult."

Throttles, maximum afterburner. Burners were already staged. Rotate to 12-14 degrees on the waterline symbol. I applied full back stick. External stores, jettison. I had to look to find the emergency-jettison button. Raise the landing gear. Done.

As I looked left and down to find the emergency-jettison button, I saw lots of water out the left side of the windscreen. I decided to eject and began positioning my body in anticipation. Time compression—in the same glance I could tell that the water was not getting any closer; I had leveled off. My finger had not made it to the emergency-jettison button. Jettison was not necessary now. Neither was ejection. What a relief!

I left the burners plugged in and climbed to what I considered a safe altitude—15,000 feet—to do a controllability check. I could find nothing wrong with the aircraft but made a precautionary landing anyway.

Here is what happened. One of the two AOA probes had jammed, reading an AOA 35 degrees. The cause of this jam was a thin metal plate, inside the AOA probe housing, that displayed the probe's serial number. The plate had come unglued and was floating freely inside the probe housing until some time between preflight and the catapult launch. I suspect the probe jammed while I got bounced around behind the JBD. The other probe was reading the proper AOA, approximately 0 degrees. The

aircraft's computers received both readings, averaged them, and thought the aircraft was nearly stalled at 17.5 degrees AOA.

At the end of the catapult stroke, the aircraft's computers commanded nose-down pitch to get out of the stall that the aircraft perceived itself in. "Garbage in, garbage out" applies to flight-control computers.

The AOA probe was freed after several seconds of flight and the aircraft flew normally for the rest of the short hop.

What did I learn as a result of this experience? I now rehearse immediate action procedures in the cockpit, instead of just knowing them cold for the brief and on paper. Having to look for the emergency-jettison button cost me precious time. I learned that immediate-action procedures do not always apply verbatim. In this case, step 2 says, "Maintain 12 to 14 degrees pitch attitude with the waterline symbol. Do not exceed 16 degrees AOA." I had to disregard the "do not exceed 16 degrees AOA", and applied maximum back stick. This was not so much a conscious decision, as it was instinctive reaction to impending disaster.

I did not tape my catapult shot that day. I tape them all now, along with other critical phases of flight. If I had taped this launch, it would have helped the investigators figure out the cause of this incident much sooner. It took a couple days to interpret the digital data stripped from the data-storage unit. During the investigation that particular aircraft remained in a down status until the faulty AOA probe was discovered and fixed. Other aircraft with the same problem were still flying!

I have also learned to bring aircraft AOA into my scan before I give the final salute on the catapult. I might have avoided this incident if I had noticed that the AOA was much higher than it should have been while I was pointed into the wind sitting on the catapult.

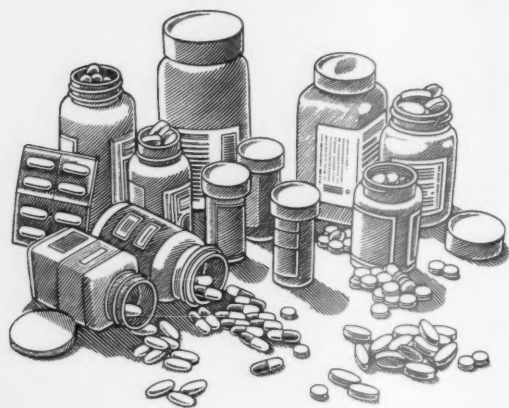
Lastly, I learned that I am capable of making the ejection decision. I had decided to eject and was beginning the process when I realized that ejection was no longer necessary.

Capt. Rollinger flies with VMFA-312. He received the Air Medal for his handling of this incident.

Vultures' Row

This list includes Flight, Flight Related and Ground Class A Mishaps.
Classifications and descriptions are subject to change.

DATE	PLATFORM	COMMAND	DAY; NIGHT	FATAL	FLIGHT REGIME; LOCATION
1 Oct	F/A-18B	NATC PAX	D	1 civ	Approach wave-off; Pax River, MD
4 Oct	AH-1W	HMM-365	D	1	Hot-refueling (AGM); At sea
13 Oct	HH-1N	VXE-6	D	3 (2 civ)	En route; Antarctica
16 Oct	F-14A	VF-302	D	0	ACM; Key West, FL
20 Oct	CH-46E	HMM-262	N	0	Night taxi attempted takeoff; Futenma, Okinawa
28 Oct	A-4M	FIT WEPS School	D	0	Simulated strike; 45nm from Yuma, AZ
1 Nov	F/A-18D	VMFA (AW)-225	D	0	High-speed abort; 29 Palms, AZ
3 Nov	EA-6B	VAQ-129	D	3	Takeoff; El Centro, CA
4 Nov	CH-53E	HMM-261	N	5	NVG ship ops; At sea
8 Nov	CH-46D	HC-11	D	0	Vertrep; At sea
22 Nov	F/A-18A	VFA-97	N	0	Night catapult; At sea
25 Nov	T-2C	VT-23	D	0	Single-engine approach; Kingsville, TX
9 Dec	AV-8B	VMA-214	D	0	En route; Yuma, AZ
15 Dec	F-14A	VF-33	D	0	ACM; Oceana Op Area
17 Dec	F-16N	VF-126	D	1	Climb out; Idaho Falls, ID
22 Dec	LC-130F	VXE-6	D	0	Landing; Antarctica (not USN)
23 Dec	F-14A	VF-201	D	1	ACM; Dallas, TX
18 Jan	F-14A	VF-101	D	0	ACM; Key West, FL
25 Jan	F-14A	VF-24	N	0	FCLP; Miramar, CA
13 Feb	CH-53D	HMH-363	N	0	Unaided external lifts; Somalia
15 Mar	F-14B	VF-101	D	2	Pilot fam; N. Carolina Coast
21 Mar	SH-2F	HSL-37	N	3	SSC; At sea
22 Mar	A-6E	VA-85	N	0	Takeoff; Fallon, NV
22 Mar	CH-53D	HMH-463	D	0	PMFCF; Kanehoe, HI
26 Mar	E-2C	VAW-124	N	5	Foul-deck waveoff; At sea
13 Apr	F-14D	VF-11	N	0	FCLP; San Clemente Is., CA
14 Apr	A-6E	VA-95	D	0	Mid-air collision with civ. acft. (low level); WA
14 Apr	SH-2F	HSL-32	D	0	ASW; At sea
21 Apr	A-6E	VA-34	N	2	Rdvz, mid-air; Nellis Range, NV
23 Apr	SH-2F	HSL-33	D	0	Landing; Bakersfield, CA
27 Apr	HH-46D	MCAS	N	0	En route; Beaufort, SC
29 Apr	F-14A	VF-21	D	0	ACM; Atsugi, Japan
12 May	AV-8B	VMA-211	D	0	En route; Yuma, AZ
19 May	VH-90	HMX-1	D	4	PMCF; La Plata, MD
21 May	F/A-18C	VFA-151	D	0	ACM; Lone Pine, CA
4 Jun	F-14A	VF-302	D	1	ACM; SoCal Op Area
11 Jun	ES-3A	NAWC	D	1	Maintenance (AGM); Pax River, MD
15 Jun	SH-60F	HS-10	D	1	PMCF; Imperial Beach, CA
17 Jun	EA-6B	VMAQ-2	D	0	Takeoff; Cherry Point, NC
22 Jun	F/A-18A	MAG-42	D	1	ACM; Yuma, AZ
25 Jun	TA-4J	VT-22	D	0	Landing; Corpus Christi, TX
3 Jul	HH-46D	HC-5	D	0	Ditching; Indian Ocean
12 Jul	F-14A	VF-84	N	1	Crewman blown overboard by jet exhaust (AGM); CVN 71
15 Jul	SH-60F	HS-1	D	1	Lineman run over by aircraft (AGM); Jax, FL
20 Jul	F-14A	VF-213	N	1	Ramp strike; CVN 72
23 Jul	A-6E	VA-75	D	2	Aircraft crashed into ridge during low-level; VA
5 Aug	F-18C	VFA-136	N	1	Aircraft crashed during bombing run; Fallon, NV
10 Aug	AV-8B	VMA-231	D	1	Aircraft crashed on short final; Cherry Point, NC
16 Aug	AH-1W/UH-1N	HMLA-367	D	2	Mid-air during photo op; Catalina Is., CA
24 Aug	HH-46D	HC-5	D	3	En route; Fujairah, U.A.E.



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